Meeting the “needs of whole ecosystems”:
The OMNRF’s Management of Wildlife
Beginning with the fur trade in the early seventeenth century, Ontario has long been the site of thriving wildlife-based industries and recreational activities. Since the time of its inception in 1972, the Ontario Ministry of Natural Resources and Forestry (OMNRF) has been tasked with ensuring that the province’s wildlife populations remain healthy and intact so that they can continue to provide these same opportunities for future generations. Indeed, in response to changing environmental, economic, and social values, the OMNRF has made significant adjustments to its approach to wildlife management over the last fifty years. Today, the Ministry’s core wildlife philosophy is grounded in the importance of biodiversity, and recognizes that “while management decisions are sometimes directed at individual species, they reflect the needs of whole ecosystems.”

An overview of the OMNRF’s various initiatives over the years provides valuable insight into the evolution of its wildlife management policies and demonstrates that many of the programs that it has implemented have been remarkably successful.

Long before the provincial government undertook responsibility for administering Ontario’s natural resources, Indigenous peoples used and managed the region’s wildlife in a variety of ways. For thousands of years prior to the arrival of European settlers, Ontario’s Indigenous populations relied on numerous wildlife species for food, clothing, and other materials necessary for their very survival, and adopted different strategies to ensure that these resources remained plentiful. Moreover, rather than defining these practices as “wildlife management,” many Indigenous cultures view them “as part of a sacred responsibility to care for the land, water and resources.” However, the advent of European settlement in Ontario forever altered Indigenous peoples’ relationship with the environment, namely through the signing of historic treaties which granted the British Crown legal authority over the province’s natural resources.
resources. It must be noted, however, that these treaties varied in scope in terms of the powers and privileges granted to Crown, and that many Indigenous communities did not sign these treaties, or did so under questionable circumstances.

The public management of Ontario’s wildlife resources dates back hundreds of years. For example, in the late eighteenth century the government of Upper Canada (modern day Ontario) imposed a bounty on black bears and wolves. However, it was not until the late nineteenth to early twentieth centuries that the Ontario government began to consolidate its “game laws and created new bureaucracies … that centralized policy making and enforcement under one roof.” For example, in the early 1890s a Royal Commission into Ontario’s game and fish issued a report which offered many recommendations to improve the provincial government’s approach to managing wildlife. The Ontario government responded promptly by implementing new wildlife policies and legislation, including the appointment of the province’s first game wardens - predecessors to today’s conservation officers with the OMNRF - in 1892. Then, in 1907, the Department of Game and Fisheries was formed, and in 1946 it was amalgamated with the Department of Lands and Forests (DLF). Nonetheless, while the government of Ontario certainly made strides in the realm of wildlife management during this period, it still had to deal with a number of problems. Indeed, “Hunting … passed through its ‘destructive’ phase before

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conservation became the watchword and management supervened.\textsuperscript{7} It eventually became evident that a fundamentally different approach to wildlife management would be required if Ontario were to conserve its abundant supply of deer, moose, bear, and other invaluable species.

Although the DLF had already introduced some more progressive wildlife management policies during its final years of existence, the Ontario Ministry of Natural Resources (MNR) took these efforts to new heights. Formed through an amalgamation of the DLF and the Department of Mines and Northern Affairs in 1972, the MNR (the title “Forestry” was not originally included) was born during an era in which the general public was expressing an unprecedented level of concern about environmental issues.\textsuperscript{8} Wildlife in particular was an area that caught the attention of the people of Ontario, especially in the more northern reaches of the province where natural resource development in general and hunting in particular played such a vital part in community life.\textsuperscript{9} In the MNR’s first Annual Report, the Wildlife Branch – which operated within the Division of Fish and Wildlife – recognized the importance of these resources in Ontario and outlined its mission to “maintain wildlife populations for the recreational and economic benefit of the people of Ontario.” Furthermore, it emphasized that “much effort is directed to the maintenance and improvement of wildlife habitat as it is habitat which determines the potential wildlife in numbers.”\textsuperscript{10}

The state of Ontario’s moose (\textit{Alces alces}) population has been a central concern for the MNR throughout its history. The number of moose in the province dropped about 20 per cent

\textsuperscript{9} Commio, 206.
\textsuperscript{10} \textit{Minister of Natural Resources: Annual Report} (1973): 9.
from 1970 to 1976, and overhunting was identified as a key contributor to the problem. By the end of the decade it was estimated that there were about 80,000 moose living throughout the province, which according to the Ministry was about half of the ideal population capacity. Consequently, the MNR began to take a more assertive approach to moose management after 1980. In that year and after much research and planning it implemented a new program which aimed to double Ontario’s moose population within 20 years, namely by introducing a selective harvesting system which included “harvest quotas, adult validation tag quotas, and the allocation of these tags to hunters through a computerized draw.” Other notable aspects of the program included habitat manipulation, enhanced predator control, and increased law enforcement.

Overall, the Ministry’s updated policies had a noticeable impact. By the late 1980s, it was estimated that Ontario’s moose population had grown to over 120,000. Throughout the 1990s the MNR reaffirmed its commitment to using a selective moose harvest system, and continued to improve its methods of moose management and regulation, but generally speaking it did not make any major alterations to its moose policies.

By the turn of the century, however, the OMNRF began reviewing its moose management program as part of a broader effort to modernize its wildlife policies. Indeed, with the passage of the Fish and Wildlife Conservation Act, 1997, which replaced the Game and Fish Act, 1980, the Ministry gained an enhanced legal framework for implementing all of its wildlife

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programs, including those related to moose.16 Among other objectives, the Ministry sought to improve Ontario’s resident moose tag draw system, to develop a specific ecological framework for moose, and to establish updated population and harvest guidelines for this particular species.17 In 2009, after much public consultation, it finalized a new provincial Moose Management Policy and a set of associated guidelines which remain in place to this day. The OMNRF’s ultimate goal “is to ensure sustainable moose populations and the ecosystems on which they rely, for the continuous provision of ecological, cultural, economic and social benefits for the people of Ontario.”18

While the Ministry’s modern moose program is comprehensive, it can be best described as reflecting an ecologically-based, “adaptive management” approach. This essentially refers to a system which recognizes that, because moose play an integral part in Ontario’s ecosystems and biodiversity and hold varying levels of socioeconomic significance throughout the province, management decisions must be “guided by newly obtained science and management information” in order “to ensure that harvest management strategies are continuously evaluated and refined.”19 The OMNRF therefore conducts rigorous studies of moose habitats, ecosystems, diseases, predators and much more in order to determine the ideal population and hunting guidelines and regulations that will ensure the long-term sustainability of the province’s moose herds. Today, it is estimated that there are approximately 91,500 moose living in Ontario, around 10% of the entire North American population.20

White-tailed deer (*Odocoileus virginianus*) management in Ontario has similarly garnered significant attention from the Ministry over the years. A series of particularly harsh winters during the early 1970s took a toll on Ontario’s deer population, leading one commentator to note that the province’s “deer herds are in serious trouble.”\(^{21}\) The MNR initially responded by enacting habitat management strategies that aimed to increase the winter food supply, but by the end of the decade it noted that “deer numbers are declining as a result of hunting, predation, illegal kill, decreasing habitat quality, and unfavourable winter conditions.”\(^{22}\) In 1980, the Ministry introduced a new selective harvest system, which included limiting the hunting of antlerless deer for the first time in almost 30 years. The ultimate goal of this new deer management program was to increase Ontario’s deer population by 25 per cent over the next decade.\(^{23}\) By 1991, the deer population had tripled as a result of these initiatives, prompting the MNR to open new deer hunting seasons and lengthen others.\(^{24}\) In the early 1990s, the Ministry produced a document which provided “the biological and sociological rationale for a comprehensive management policy for Ontario’s White-tailed deer,” but otherwise, much like with moose, it did not implement any drastic changes to its deer policies during this decade.\(^{25}\)

That being said, the OMNRF has certainly reviewed and adjusted aspects of its deer management program during the twenty-first century. In this regard it has, among other things, aimed to improve its methods of providing biologists with data and information for setting deer hunting quotas, and to develop better strategies for detecting and monitoring infectious diseases that affect deer. The Ministry’s deer management efforts are also largely guided by its *Cervid*

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Ecological Framework (CEF). Released in 2009, CEF provides strategic direction for integrating the management of Ontario’s cervid species - which includes white-tailed deer, moose, woodland caribou, and American elk - at the “broad landscape and ecological level … in relation to each other with consideration of the broader ecosystems they share.” In addition, the Ministry recently undertook a review of its Ontario Deer Harvest Decision Support System (which is used to regulate deer-harvest levels in order to maintain a healthy deer population) and strove to enhance its approach to wildlife-disease surveillance, namely by working closely with the Canadian Cooperative Wildlife Health Centre to monitor and respond to disease outbreaks.26 About 400,000 white-tailed deer currently reside in Ontario, and continue to hold great ecological, social, and economic importance to citizens across the province.27

In recent years, the Ministry has dedicated much energy to managing the population of yet another antlered species, the American elk (Cervus elaphus). Although it had practically vanished from Ontario by the end of the nineteenth century, in the late 1990s the MNR commenced a project to restore this animal to the province. Between 1998 and 2001, nearly 450 elk were released at four sites across Ontario: Lake of the Woods, Lake Huron’s North Shore, Nipissing/French River, and Bancroft/North Hastings. The restoration of elk to Ontario has been remarkably successful, with the OMNRF describing it as “a significant achievement” which “represents an important contribution to Ontario’s biodiversity.” The Ministry has since developed a comprehensive elk management plan in order to ensure that this species’ population does not return to its formerly destitute state. This program includes population monitoring, habitat management and disease prevention, and also setting harvest guidelines. Moreover, since

the OMNRF describes its plan as a sustainable management program rather than one focused purely on population restoration, it appears that Ontario’s elk population has become reasonably well-established in the Bancroft area where, in the fall of 2011, Ontario’s first modern elk hunt was introduced.  

Managing Ontario’s black bear (*Ursus americanus*) population has undoubtedly been one of the MNR’s most perplexing wildlife issues. The black bear has long been the subject of controversy in Ontario, and this has complicated the provincial government’s attempts to develop coherent bear management policies for much of the twentieth century. Although this animal attained big-game status in 1961, it was not until the 1980s that the MNR undertook a major overhaul of its bear management policies. Around the start of the decade, with the popularity of black bear hunting in Ontario steadily rising, the Ministry made a number of adjustments to the bear licensing system. Furthermore, it initiated multiple scientific studies in order to gain a better understanding of the life cycle of black bears. This eventually culminated in the first MNR Black Bear Management Program, which was introduced in 1987. Its main goal was to conserve the province’s black bears, but it also aimed to manage the animals on a sustained yield basis, to reduce damage to property or the threat to public health and safety from black bears, and to maximize the benefits of resident and non-resident black bear hunting in Ontario. In addition, the MNR introduced a number of new bear hunting regulations throughout the rest of the decade as a part of its new management program.

Yet these measures certainly did not put an end to the contentious atmosphere surrounding black bear management in Ontario. Beginning in the mid-1990s, numerous

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29 Commito, 231-244.
environmental groups began criticizing various aspects of black bear hunting, including the spring season, and demanding that they be eliminated in Ontario. After years of protest and pressure, the Ontario government officially cancelled the spring bear hunt in March 1999. Within a matter of years, many northern Ontario residents began expressing concern over the perceived increase in human-bear conflicts, and so the provincial government implemented a program known as Bear Wise. It sought to reduce conflict between humans and bears through education and prevention and collaborative efforts between the government, communities, and individuals. Then, in the fall of 2013, the Ministry announced that it was proposing a two-year spring bear hunt pilot project starting in 2014, which allows Ontario’s residents to hunt bears in designated sections of northern Ontario (particularly near areas with historically high levels of reported human-bear conflicts such as Sudbury and Thunder Bay). In February 2016, the OMNRF announced that it was expanding Ontario’s spring bear hunt pilot project to all areas with a fall bear season, and was allowing non-resident hunters to participate. In addition, it extended the pilot through 2020 to gather more information to assess the effect of a spring bear hunt on human-bear conflicts and to support economic growth and tourism. There are an estimated 85,000 to 105,000 black bears presently living in Ontario, which the Ministry oversees using an ecologically-based sustainable management approach that strives to maximize the socioeconomic benefits that this animal offers while simultaneously reducing potential conflicts with humans.

30 Ibid., 259-263.
The OMNRF’s approach to managing Ontario’s wolf and coyote populations has undergone considerable change since the early 1970s. Traditionally viewed as posing a threat to livestock, deer, and other wildlife that humans have generally held with higher regard, wolves and coyotes have for centuries been treated with contempt by people and governments across North America.\(^{33}\) However, by the time the MNR had come into existence, the Ontario government was slowly shifting toward a more progressive wolf and coyote management program which reflected changing societal attitudes towards these animals. In 1972, for instance, Ontario repealed its nearly 200-year old wolf bounty, and implemented legislation which established a compensation program for landowners who lost livestock to wolves or coyotes.\(^{34}\) Moreover, wolf management now fell under the authority of the *Game and Fish Act, 1962* (now *the Fish and Wildlife Conservation Act, 1997*), thereby allowing the Ministry to manage wolf harvesting through licences, seasons, and limits.\(^{35}\) By the 1980s both wolves and coyotes were classified as fur-bearers, making it illegal for anyone but licensed trappers to kill them in exchange for money.\(^{36}\) Nevertheless, the MNR’s wolf and coyote control programs continued to emphasize the use of traps and snares (often carried out by local trappers employed by the Ministry) because “they have been proven to be the most selective and effective means of eliminating unwanted predators.”\(^{37}\)

Today, the OMNRF manages the province’s wolf and coyote populations in the same scientific, ecologically-sensitive way that it does for all other wildlife species. In 2005, Ontario unveiled its new strategy for wolf conservation, which seeks to ensure ecologically sustainable

\(^{33}\) Commito, 8-20.
\(^{35}\) “Wolves in Ontario,” *Ontario Ministry of Natural Resources* (February 2007), 3.
\(^{37}\) *Wolves and Coyotes in Ontario* (Ontario Ministry of Natural Resources, Undated), 17.
wolf populations that can provide citizens with various social, cultural, and economic benefits. The Ministry also strives to enhance public awareness about the role of wolves in Ontario’s ecosystems. The OMNRF conducts wolf and coyote population assessments, manages prey species and habitat, and conducts information analysis in order to assess the health of wolf populations, set appropriate harvest guidelines for the province and to reduce human-wolf conflicts.38 Ontario is currently home to about 9,000 wolves, including grey wolves, Algonquin wolves, and eastern coyotes, as well as various hybrids of these species. These animals can be both hunted and trapped in Ontario (though certain restrictions have been imposed in recent years), activities which contribute millions of dollars to the provincial economy annually.39

In addition, the Ministry has been responsible for protecting numerous endangered species in Ontario over the years. As part of its greater commitment to addressing environmental issues, in 1971 the Ontario government passed The Endangered Species Act, 1971, which sought “to provide for the conservation, protection, restoration and propagation of species of fauna and flora of the Province of Ontario that are threatened with extinction.”40 By 1979 there were thirteen species or subspecies designated under the Act, most notably the peregrine falcon. Beginning in the 1960s, North America’s peregrine falcon population experienced a sharp decline largely as a result of the increased use of chemical pesticides following the Second World War.41 In the mid-1970s the MNR began a project to re-establish this species of bird in Ontario, and by 1988 it had released a total of 172 peregrine falcons throughout the province.42

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also endeavoured to protect many other endangered or threatened plant and animal species during the 1980s, such as the bald eagle, the Karner blue butterfly, the prickly pear cactus, and even the polar bear. More generally, the Ministry’s endangered species program evolved into a truly comprehensive initiative which involved identifying and assessing rare, threatened, or endangered species and developing management measures and programs to protect them. By the end of the twentieth century, there were 26 species protected by law in Ontario.

The OMNRF is now responsible for regulating the populations of over 200 animals and plants which are at risk of disappearing from Ontario. The Endangered Species Act, 2007 provides substantial protection for Ontario’s most vulnerable wildlife species by providing a framework through which the OMNRF can enforce its relevant policies and programs. The Ontario government worked closely with environmentalists, conservationists, and other interest groups in drafting this new law, which replaced the Endangered Species Act, 1971. In fact, David Ramsey, Minister of Natural Resources (2003-2007), described the Act as having set “a gold standard for species protection,” while Environmental Defence Canada applauded it as the best piece of legislation of its kind in the entire country. Emphasizing the importance of science-based assessments (which also includes the use of traditional Indigenous knowledge), the Act allows the Ministry to provide automatic legal protection to species classified as endangered or threatened. Furthermore, it offers means for reducing the human impact on these species and their habitats, as well as tools to facilitate protection and recovery strategies. It also establishes clear legal timelines for the implementation of strategies and programs designed to protect and recover at-risk species. Although the legislation has proved highly contentious to natural

resource industries operating in Ontario, steps are being taken to address the concerns that have been raised.46

One of the MNR’s greatest success stories in the realm of wildlife management, particularly as it relates to endangered species, was its effort to reintroduce the wild turkey to Ontario. Once relatively abundant throughout southern Ontario, the wild turkey (*Meleagris gallopavo silvestris*) disappeared from the region during the early twentieth century mainly as a result of deforestation and overhunting. Indeed, as the DLF noted in 1948, “the curtain came down simultaneously on turkey and forest. The last bird may have been shot, but if he was, it was the axe and not the gun that made him the last.”47 Numerous attempts had been made to reintroduce wild turkeys to the province over the years, but they were all unsuccessful.48 Finally, in 1984, the Ministry, in collaboration with the Ontario Federation of Anglers and Hunters and other conservationist groups, implemented a renewed reintroduction program. Within three years, over 250 wild turkeys had been acquired from various parts of the United States and released in five MNR districts in southern Ontario: Napanee, Simcoe, Huronia, Cambridge, and Niagara.49 In 1987 the Ministry held a controlled hunt for wild turkey in the Napanee district, and by the end of the decade there were more than 6,000 of these birds living in Ontario.50 Seven years later, the MNR released its “Wild Turkey Management Plan for Ontario,” which, through improved monitoring efforts, ecosystem-based habitat management, and enhanced public

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education, “completed the restoration of wild turkeys to the known historic range of the bird in Ontario.”

The success of the OMNRF’s wild turkey restoration project continues to be seen today and has had a positive impact on Ontario’s biodiversity. Indeed, in 2007 the Ministry estimated that there were over 70,000 wild turkeys in the province, allowing for somewhat more liberal regulations and an increase in hunting opportunities. The Wild Turkey Management Plan for Ontario released that year takes an ecological and landscape-based approach to managing the species with population management goals based on the broader landscape in which turkeys are found. Consequently, the objectives for Ontario’s wild turkey policies have changed somewhat over the years. Rather than being framed as a restoration project, the OMNRF’s current wild turkey program focuses on the sustainable management and harvest of populations in southern Ontario while allowing for hunting opportunities in the north where appropriate.

The MNR has done much to protect Ontario’s waterfowl and small game species, as well as the habitats upon which many of these species depend. This includes ducks, grouse, pheasants, geese, rabbits, and many more. Moreover, preserving Ontario’s wetlands (commonly known as bogs and swamps) has attracted significant attention from the MNR over the last few decades. Indeed, as it noted in its 1982 Annual Report, “Wetlands are a unique natural resource, storing and purifying water, helping control floods, providing timber products and wild rice, several game species and opportunities for outdoor recreation.” Unfortunately, by the end of the decade the Ministry reported that roughly 75 per cent of southern Ontario’s wetlands had been

lost due to agriculture, development, and erosion.\textsuperscript{54} As a result, in the early 1990s the MNR formulated a wetland policy designed to protect these parts of the province. Using a standardized method of wetland identification, the Ministry’s new program aimed to provide guidance to municipalities and planning authorities in an effort to preserve these valuable resources.\textsuperscript{55} Most importantly, these policies prohibited “any development in important wetlands” in various parts of Ontario, and required municipal governments to “include restrictions on the development of wetlands in their official plans and zoning bylaws.” Environmental groups, such as the Federation of Ontario Naturalists (now Ontario Nature), had long been pushing for this type of action, and ultimately praised the Ministry’s decision.\textsuperscript{56}

Small game and wetland management has occupied much of the OMNRF’s mandate during the twenty-first century. Although ducks, geese, and other migratory game birds are protected under the federal government’s \textit{Migratory Birds Convention Act, 1994}, Ontario’s small game species “are generally managed indirectly by the policies protecting their habitat.”\textsuperscript{57} The Ministry’s wetland policies are guided primarily by the Ontario Wetland Evaluation System, which “provides a consistent method of assessing wetland functions and their value to society” and “enables the province to rank the relative value of wetlands for land use planning purposes.”\textsuperscript{58} Using this system, the OMNRF collaborates with municipalities, conservation authorities, and other relevant parties to develop land use strategies that ensure the long-term viability of the province’s wetlands and the ecosystems and species that depend on them. Ontario is home to more than 30,000,000 hectares of wetlands, and in August 2016 the Ministry began

\textsuperscript{58} \textit{Ministry of Natural Resources: Results-based Plan} (2013-14): 37.
consultation on a proposed Wetland Conservation Strategy for Ontario for the period 2016 to 2030.\textsuperscript{59}

Overall, the historical development of the Ministry’s approach to wildlife management has been characterized by an increased emphasis on two main concepts, the first of which relates to public participation. Beginning in the 1980s, the MNR made a concerted effort to build a closer relationship with the people of Ontario in general, and this approach is particularly evident in terms of wildlife resources. Indeed, the OMNRF has consistently sought the public’s input on a host of wildlife-related issues over the years, including hunting and trapping regulations, habitat management, and land use. In 1985, for instance, it established a $300,000 venture known as the Community Wildlife Involvement Program (CWIP), which sought to encourage the public to get involved with the planning and implementation of different wildlife management projects.\textsuperscript{60} More recently, the Ontario government passed the \textit{Heritage Hunting and Fishing Act, 2002}, which recognized the important contributions that ordinary citizens have made to the “conservation, restoration, and management” of the province’s wildlife resources, and thus legally codified Ontarians’ right to hunt and fish. In addition, under the Act the Minister of Natural Resources became officially responsible for “the promotion of public participation in fish and wildlife conservation programs.”\textsuperscript{61}

The other central idea that has shaped the OMNRF’s modern wildlife management policies pertains to the importance of biodiversity. Once concerned primarily with the economic


\textsuperscript{60} “Ontario sets up $300,000 project for wildlife improvement by public,” \textit{The Globe and Mail}, 20 June 1985, page M12; \textit{Minister of Natural Resources: Annual Report} (1986): 56.

and recreational aspects of Ontario’s wildlife resources, the Ministry now places environmental and ecological considerations at the centre of its wildlife policies and programs. Consequently, the OMNRF recognizes that the various animal and plant species that inhabit our province must be managed within the broader context of the interconnected ecosystems they comprise rather than on a strictly individual basis. This has fostered a philosophy of wildlife stewardship which is constantly adapting and evolving in response to new scientific data and environmental phenomena in an effort to preserve and maximize the many benefits that these resources offer the people of Ontario. Most notable in this regard has been the Ministry’s role in helping the Ontario government devise a plan to conserve biodiversity, a program officially known as “Biodiversity: It’s in Our Nature.”62 The OMNRF will undoubtedly strive to improve upon these methods as it moves forward with its mandate to protect the province’s treasured wildlife species, and has recently consulted on a discussion paper for building a proposed wildlife conservation strategy for Ontario.63

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